

SLEEP DISORDERS



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Hypothesis

1

Your lifestyle will strongly determine whether you will develop a sleeping disorder or not.



Dateset



medical.csv

- Gender (male, female)
- Physical activity (0-100)
- Quality of sleep (0-10)
- BMI category (normal, overweight, obese)
- Stress level (0-10)
- Sleep disorder (yes, no)
- Heart rate (0-100)
- ...



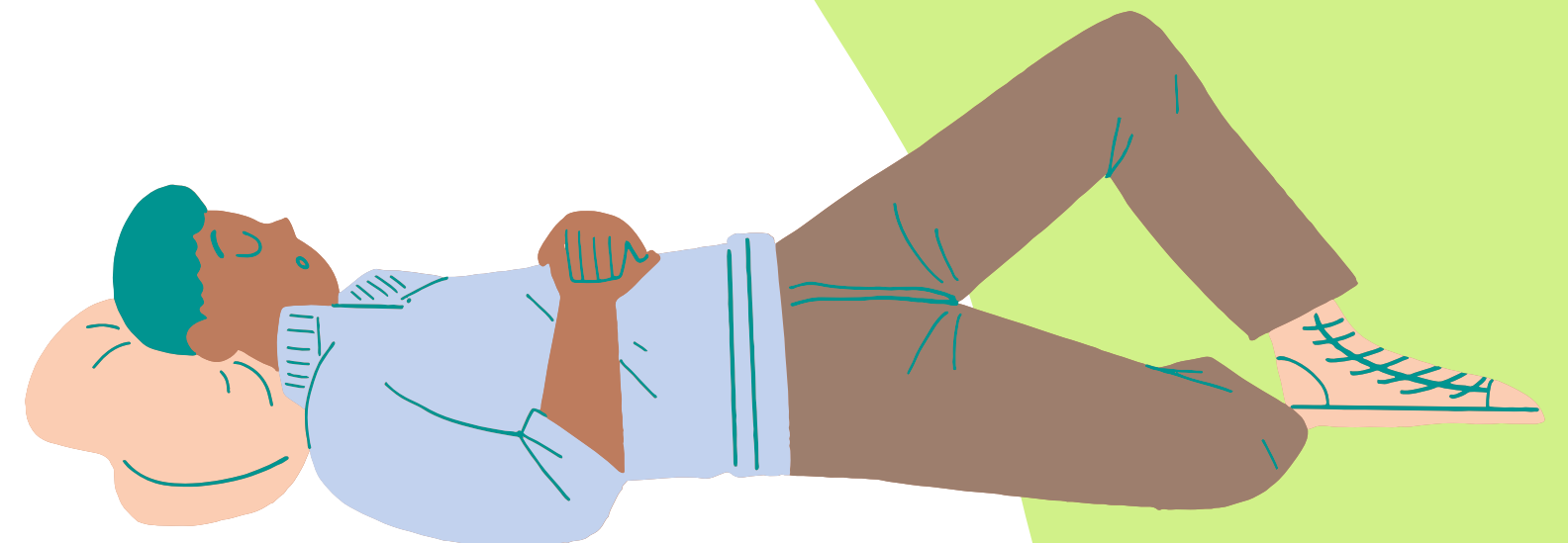
SQL and visualizations

SQL

1 Sleep duration by BMI and age

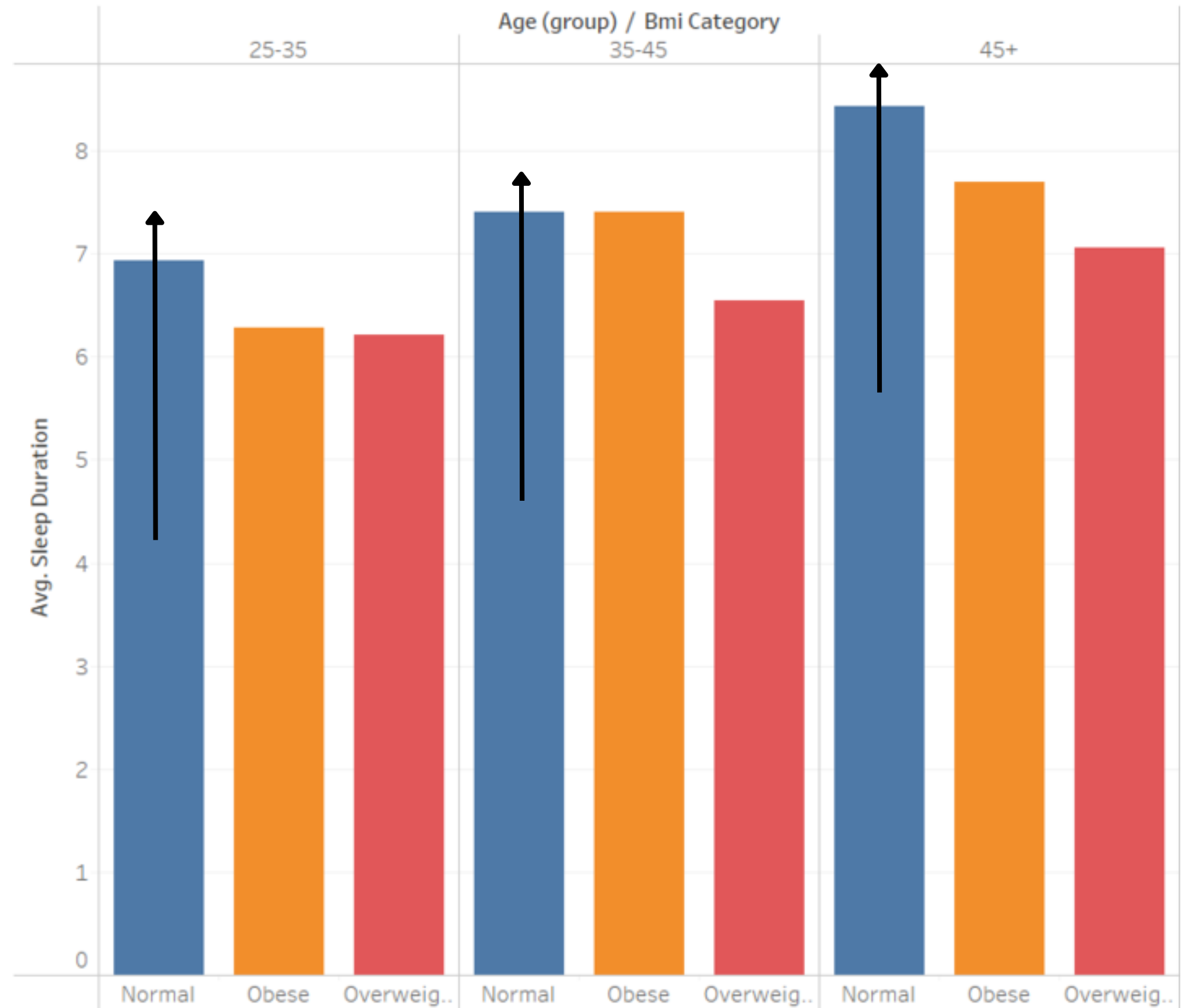
```
• SELECT bmi_category,  
    CASE  
        WHEN age >= 25 AND age < 35 THEN '25-35'  
        WHEN age >= 35 AND age < 45 THEN '35-45'  
        ELSE '45+'  
    END AS age_group,  
    round(AVG(sleep_duration),2) AS average_sleep_duration  
FROM medical  
WHERE bmi_category = "Normal" or bmi_category = "Overweight" or bmi_category = "Obese"  
GROUP BY bmi_category, age_group;
```

	bmi_category	age_group	average_sleep_duration
►	Overweight	25-35	6.02
	Normal	25-35	6.91
	Obese	25-35	6
	Overweight	35-45	6.53
	Normal	35-45	7.39
	Obese	35-45	7.4
	Overweight	45+	6.98
	Obese	45+	7.7
	Normal	45+	8.43



Tableau

1 Sleep duration by BMI and age

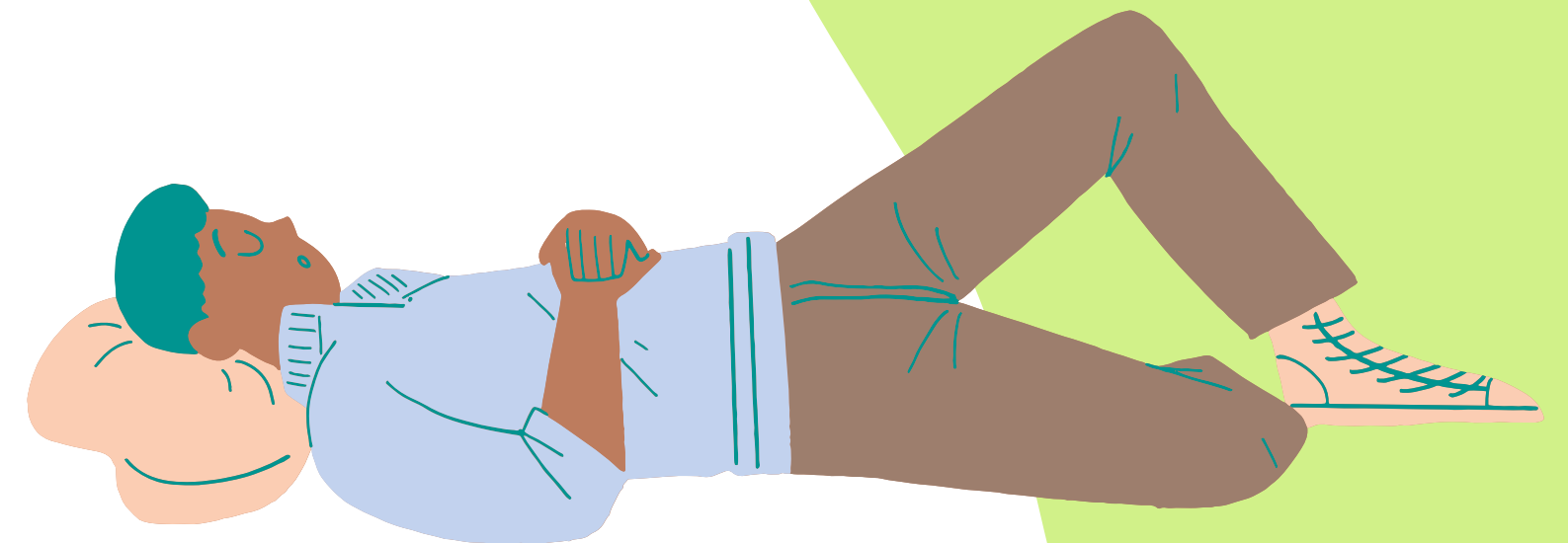


SQL

2 Quality of sleep by BMI

```
SELECT bmi_category as BMI, round (avg(quality_of_sleep),2) as Quality
FROM medical
WHERE bmi_category= "Normal" or bmi_category= "Overweight" or bmi_category= "Obese"
GROUP BY bmi_category
order by Quality desc;
```

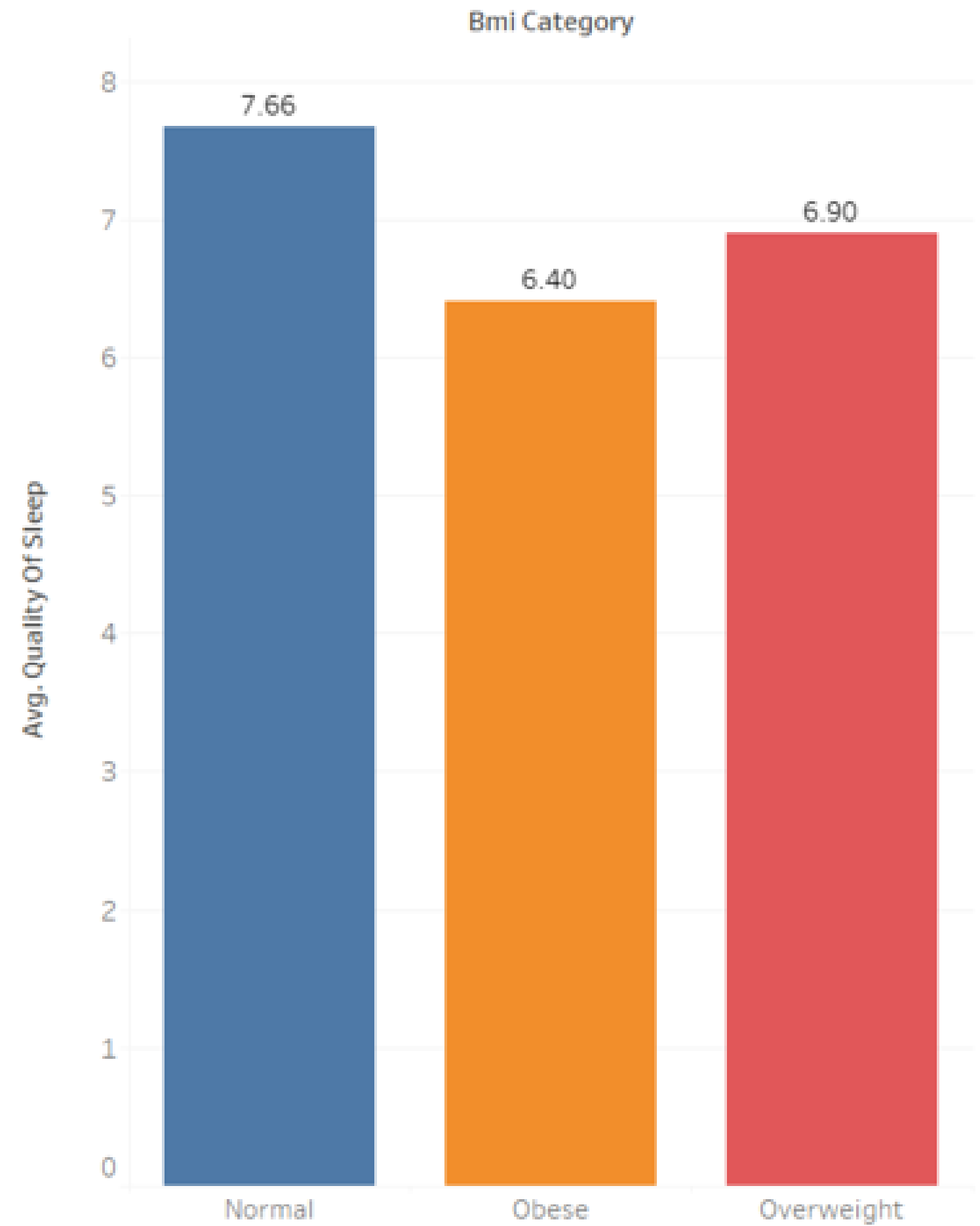
BMI	Quality
Normal	7.66
Overweight	6.90
Obese	6.40



Tableau

2

Quality of sleep by BMI



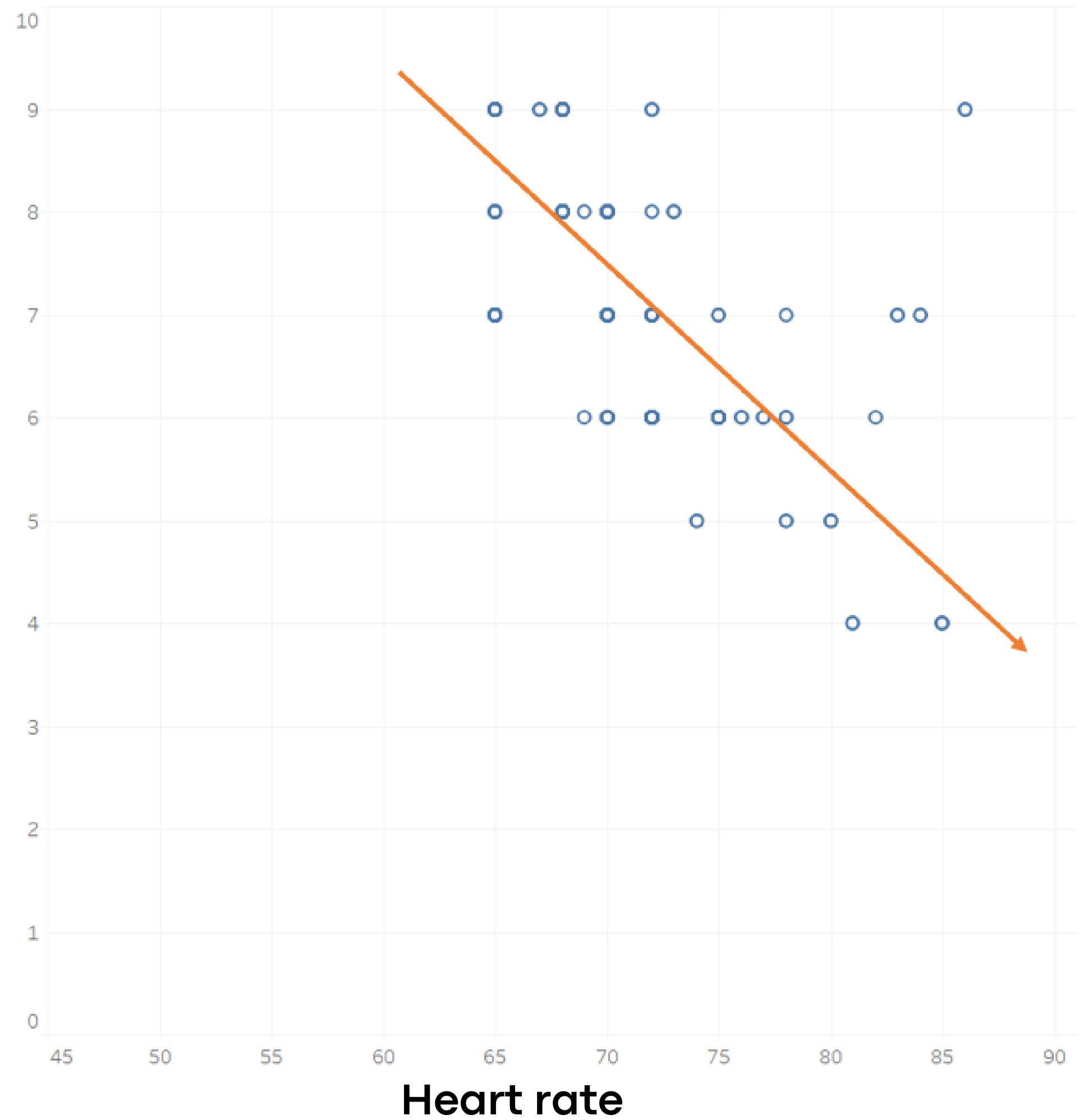
Correlations

Let's dig deep on our hypothesis!

Negative correlation



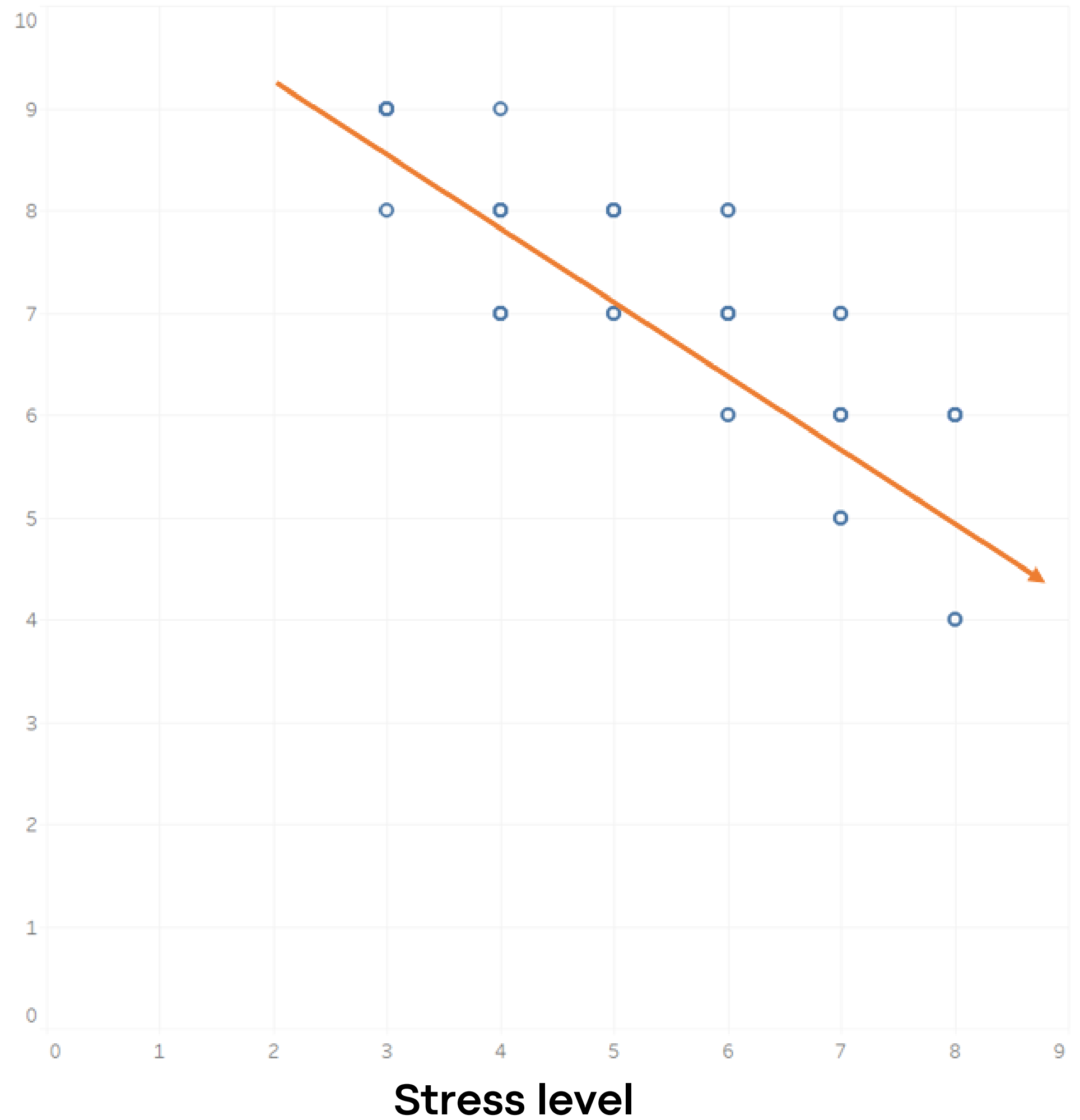
Quality of sleep



Negative correlation



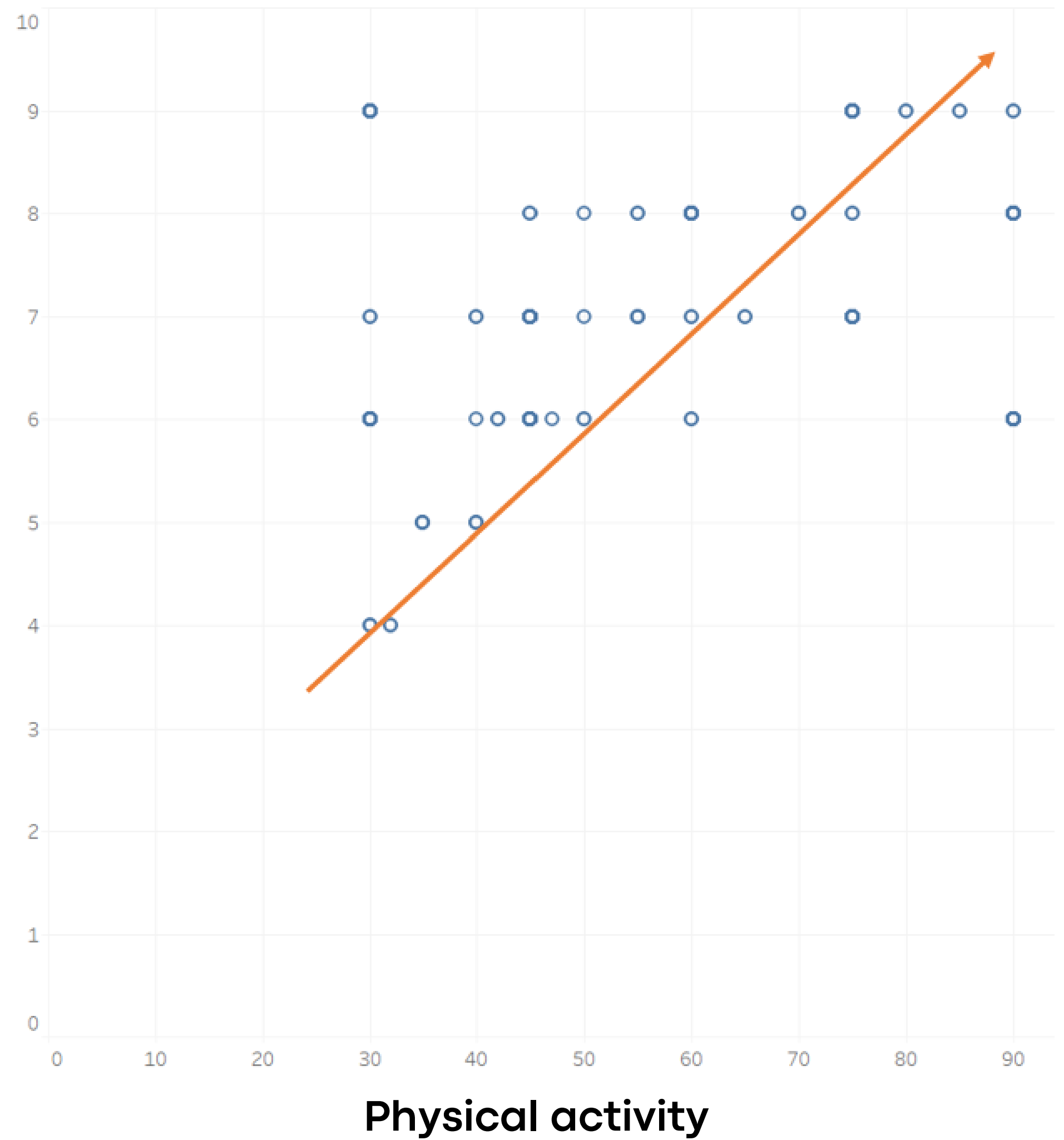
Quality of sleep



Positive correlation



Quality of sleep



Conclusions

- 1 Hypothesis proven
- 2 Have and active and healthy lifestyle

